RL-308
VHF/UHF TRANSCEIVER

Professional Portable Radio

User's Manual

REXON®
What An Excellent Radio!

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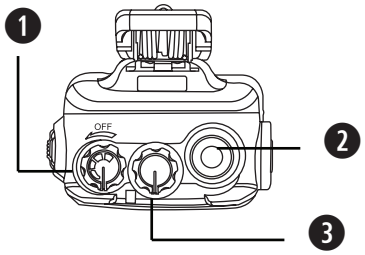
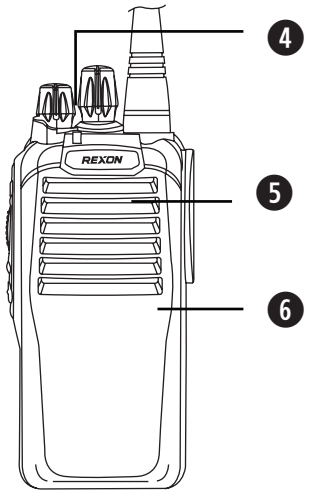
Parts Name & Functions

TOP



FRONT



① **Power/Volume Knob**:
Rotate it to turn on the transceiver and to adjust the volume.

② **Antenna Connector:**
Fit the antenna to this MX type connector.

③ **Channel Selection Knob:**
Rotate it to select a channel or a group.

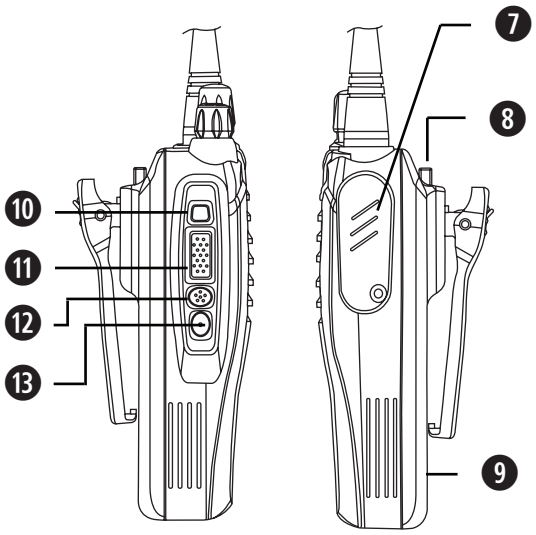
④ **LED Indicator:**

⑤ **Speaker**

⑥ **Mic**

LED Color	Status Indication
Continuous “RED” lighting	TX / programming Read
Continuous “GREEN” lighting	RX / Programming Write
Flashing “AMBER”	Scanning
Continuous “AMBER”	RX mode but with unmatched tone signalling
Flashing “Red”	Sending a Selective Call
Flashing “GREEN”	Received matched Selcall signaling or tone
BEEP sound	Status Indication
Beep every 30 seconds	warning for battery low
Beep while pressing Hi/Low button	one Beep for low power; two Beeps for high power
Beep while pressing programmable button	one beep for enable the function; two beeps for disable it

SIDE



⑦ External Speaker/Mic Connector

⑧ Release Buckle

⑨ Battery Pack

⑩ Side button A: programmable (Priority Call/ Emergency siren/ Turbo PTT)

⑪ Side button B / PTT (Push To Talk)

⑫ Side button C: programmable

⑬ Side button D: programmable

Fitting & Removing the Battery Pack

– To Install the battery pack

1] Fit the bottom edge of the battery pack into the holes of the transceiver cabinet bottom.

2] Push the battery pack down to the transceiver aluminum chassis till the end click.

– To remove the battery pack

Keep pressing the release buckle of the battery pack and lift the battery pack up from the transceiver body. Note: It is normal for this buckle to be stiff.

Charging the Battery Pack

1] Connect the jack of switching adaptor into the socket of the charging cradle.

2] Plug the switching adaptor into the power outlet.

3] Insert the radio into the cradle

4] Charge the radio with standard charger for 4 hours; with rapid charger for 2 hours.

- Make sure the radio is turned off while charging it.
- Do not forget to remove the radio from the charger when the battery is full-charged.

LED Color	Status Indication
Continuous Yellow	AC power supply is well connected.
Continuous Red	Fast charging mode
Continuous Green	Fully charged
Flashing Red over 5 minutes	Something wrong with charging circuit or battery pack. Please check!
Flashing Red for 5 minutes	Slow charging when battery voltage is too low to be fast charged

Basic Operation

Turn the radio On/Off & Adjust Volume

1] Rotate the PWR/VOL knob clockwise till the radio is turned on. Voice announcement for channel number will be heard after auto testing is done, if voice announcement is enabled through PC programmer.

2] Enable Monitor function (Programmable in C or D button) to hear the background noise as volume reference. Rotate the PWR/VOL knob clockwise to increase its volume or counter-clockwise to reduce its volume.

3] To turn the radio off, rotate the PWR/VOL knob counterclockwise to the end.click.

Channel Selection

RL-308 is allowed to be programmed with 16 channels * 16 groups = 256 channels totally.

1] To select a channel: Rotate the channel selection knob to choose the channel you want. Voice announcement for channel number indicator (programmable) will be heard.

2] To select a group: Keep holding button A and rotate the channel selection knob for choosing the group. After releasing A button, you can select the channel as procedure 1.

A continuous DU sound will be heard if you switch to a channel or a group not being programmed in advance.

Receiving

RL-308 can be programmed to work channel by channel in “Open traffic” or “Group Mode” (CTCSS/DCS/Selcall). Group mode prevents other users on the same channel from being heard on your radio. LED indicator will glow green & speaker will be unmute when the radio receives a call.

Monitor

This allows you to over ride the squelch and the “CTCSS” or “DCS” tones. It is useful to monitor the channel before you transmit to ensure there is no one using the channel when you have CTCSS or DCS tones programmed. Monitor function can be programmed in button C or D with long press or short press. Ask you dealer how it is set up through PC programmer.

Transmitting

Before transmitting, monitor the channel you are using to ensure it is not busy. Keep pressing PTT button and start talking at approximately 2 inches from the MIC hole. During transmitting, the LED on the top of the radio will glow red. Release PTT button when you finish talking.

Programmable functions

Ask your dealer for programming RL-308 with the following functions. The programmable buttons A/B/C/D can be tailored according to your need. In general, the radio will beep a “DU” sound when the programmed function is enabled (by either long press or short press). Duplicate the same procedure to disable this function, and the radio will beep a “DuDu” sound as indicator.

1] Priority Call: The radio will shift from the present working channel into pre-defined priority channel. After enable it, you will send/receive message on the priority channel, not on the present channel.

2] Emergency Siren/Call: It will either siren at your own side or send Emergency code to others through the present working channel.

3] Lone Worker: Once activating Lone Worker button (programmable), the radio will send an emergency call, which has been set by programmer, when pre-set timer is reached. Before sending the emergency call, a DUDUDU sound will be heard to remind the user of pressing any button to re-start the timer.

4] Turbo PTT: An extra turbo PTT to have max. output power up to 6-6.5W for some critical environment. It optimizes the best balance between battery’s working hours and max. output power.

5] Call 1/ Call 2: To transmit pre-set selcall (5tone, 2tone, or DTMF)

6] Scan: During scanning, LED indicator will flash in green. When scanning a busy channel, LED indicator will glow in red. Ask your dealer for different Scan modes of your choice, including normal scan, priority scan, & dual watch.

7] Delete a Nuisance Channel: During scanning, when it resumes on a busy channel which you don’t want to hear, you can remove this channel temporarily from the scan list. Then, it won’t be scanned until the radio is turned on again.

8] Squelch Level: During RX mode, you can set squelch level from 0 to 9 with voice announcement. 0 means squelch cancelling; 9 means tight squelch. Setting the radio to the tightest squelch level, you can avoid unwanted signals or noise, but you may not receive a weak signal.

9] Reverse TX & RX: TX frequency & sub tone turns to RX frequency & sub tone, and vise versa. Talk Around: You can directly communicate with other radios in your group in case the repeater is not activated or you are out of the repeater range. Through PC programmer, you can define Talkaround to resume at either TX or RX channel.

10] Talk Around: You can directly communicate with other radios in your group in case the repeater is not activated or you are out of the repeater range. Through PC programmer, you can define Talkaround to resume at either TX or RX channel.

11] Lock / Unlock: To prevent users from activating some function by accidental touch. Once you activate lock function, buttons C&D will be locked with a beep sound when you press it. Channel selection knob can be also locked if you enable it though PC programmer.

12] TX Power Selection: A Du sound indicates low TX power; a DuDu sound indicates high TX power.

13] Whisper: It will increase mic sensitivity to make weak audio at your side to be heard by others loudly; however, background noise at your side will be increased too.

14] Battery Capacity Indicator : Du means low battery (need to be charged), DuDu means 50% left, DuDuDu means 70-80%, & DuDuDuDu means fully charged.

15] Auto TX : The radio will switch to priority channel and automatically transmit without your pressing PTT. The time intervals for auto TX & RX modes can be set through PC programmer. Turn off the radio to disable auto TX.

16] VOX: You can talk without pressing PTT. VOX function should be activated with optional plugged-in speaker/mic to avoid accidental activation.

17] VOX sensitivity level: You can set VOX sensitivity level from 1 to 5 by PC programmer in advance or by programmable button C/D according to your present environmental background noise. 1 means most sensitive for quiet environment; while 5 for noisy environment.

18] Scrambler: This analog voice inversion scrambler can offer a more confidential communication. Other radios at the same frequency will receive only disordered noise.

19] Encryption (optional): An advance scrambler/encryption board can be plugged into RL-308 to have a much more secure communication.

20] Bluetooth (optional): Once Bluetooth module is plugged in, RL-308 can be paired with any off-the-shelter BT headset.

– CTCSS table

67.0	97.4	135.5	192.8	165.5
71.9	100	141.3	203.5	171.3
74.4	103.5	146.2	210.7	177.3
77.0	107.2	151.4	218.1	183.5
79.7	110.9	156.7	225.7	189.9
82.5	114.8	162.2	233.6	196.6
85.4	118.8	167.9	241.8	199.5
88.5	123.0	173.8	250.3	206.5
91.5	127.3	179.9	69.3	229.1
94.8	131.8	186.2	159.8	254.1
150	OFF			

– DCS code

023	025	026	031	032
043	047	051	054	065
071	072	073	074	114
115	116	125	131	132
134	143	152	155	156
162	165	172	174	205
223	226	243	244	245
251	261	263	265	271
306	311	315	331	343
346	351	364	365	371
411	412	413	423	431
432	445	464	465	466
503	506	516	532	546
565	606	612	624	627
631	632	654	662	664
703	712	723	731	732
734	743	754	OFF	